


# Russell County Agriculture and Natural Resources April 2024 Newsletter

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Jonathan Oakes, CEA for Agriculture and Natural Resources

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Agriculture and Natural Resources  
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Lexington, KY 40506



Disabilities  
accommodated  
with prior notification.

## Timely Tips

*Dr. Les Anderson, Beef Extension Professor, University of Kentucky*

### Spring Calving Cow Herd

- Watch cows and calves closely. Work hard to save every calf. Calves can be identified with an ear tag while they are young and easy to handle. Commercial male calves should be castrated and implanted. Registered calves should be weighed at birth.
- Cows that have calved need to be on an adequate nutritional level to rebreed. Increase their feed after calving. Do not let them lose body condition. Keep feeding them until pastures are adequate.
- Do not “rush to grass” although it can be really tempting. Be sure that grass has accumulated enough growth to support the cow’s nutritional needs before depending solely upon it. Cows may walk the pastures looking for green grass instead of eating dry feed. This lush, watery grass is not adequate to support them. Keep them consuming dry feed until sufficient grass is available to sustain body condition. We’ve spent too much money keeping them in good condition to lose it now!
- *Prevent grass tetany!* Provide magnesium in the mineral mix until daytime temperatures are consistently above 60oF. Mineral supplement should always be available and contain a minimum of about 14% magnesium. Make sure that your mineral mix also contains adequate selenium, copper, and zinc. You can ask your feed dealer about the UK Beef IRM High Magnesium Mineral.
- Make final selection of heifer replacements. Strongly consider vaccinating with a modified-live BVD vaccine.
- Purchase replacement bulls at least 30 days before the breeding season starts. Have herd bulls evaluated for breeding soundness (10-20% of bulls are questionable or unsatisfactory breeders). Get all bulls in proper condition (BCS 6) for breeding.
- If you are going to use artificial insemination and/or estrous synchronization, make plans now and order needed supplies, semen, and schedule a technician.
- Prebreeding or “turnout” working is usually scheduled for late April or May between the end of calving season and before the start of the breeding season (while cows are open). Consult your veterinarian about vaccines and health products your herd needs. Decide now on the products needed and have handling facilities in good working order. Dehorn commercial calves before going to pasture.

### Stockers

- Do not go to pastures too soon, give plants some growing time. Then stock at two to three times the July rate and rotate rapidly.
- “Condition” purchased calves prior to grazing. They should be processed and fed a conditioning diet prior to being placed on pasture. You can also use this time to introduce them to electric fences used in rotational grazing.
- Provide a good mineral supplement which contains a rumen modifier (Rumensin, Bovatec, etc.) along with adequate levels of copper and selenium.

## Fall Calving Cow Herd

- Pregnancy check cows now and cull open ones at weaning especially if the open cows are older than 6 years of age.
- Re-implant feeders.
- Consult with your veterinarian about preweaning working of the herd.
- You may let calves creep-graze wheat or rye if it is available. Calves will benefit from extra feed until spring grass appears.
- Plan marketing strategy for feeder calves.

## General

- We have made a muddy mess this winter, so be prepared to reseed bare spots. Our forage group has some excellent information on restoring heavy-traffic areas.
- Make plans to improve hay feeding areas to avoid muddy conditions like we have faced this winter. Consider geotextile fabric with gravel or concrete feeding pads.
- Prepare for the grazing season. Check fences and make necessary repairs. Check your corral, too.
- Get everything ready to make high quality hay in May! Have equipment serviced and spare parts on hand. Order baler twine now. Be prepared to harvest an adequate supply of hay when you have the opportunity. Re-supply the extra hay that you fed out of the barn. This past winter caused most producers to exhaust their hay supply, so it is time to re-stock.
- Plan now for fly control ... decide what fly control program that you will use but do not put insecticide eartags on cattle until fly population appears.

## **Act Now to Control Poison Hemlock**

*Dr. J. D. Green, Extension Weed Scientist, Dr. Megan Romano, UKVDL Toxicologist, Dr. Michelle Arnold, Ruminant Extension Veterinarian*

During the early summer, the presence of poison hemlock (*Conium maculatum*) is more evident. Although this plant is often seen along roadways, abandoned lots, fencerows, and other non-cropland sites, in recent years it has expanded out into grazed pasture lands and hay fields. Poison hemlock is toxic to a wide variety of animals including man, birds, wildlife, cattle, sheep, goats, pigs, and horses. It contains several neurotoxic piperidine alkaloids; the two major ones are coniine (major alkaloid in the mature plant and seed) and the more toxic gamma-coniceine (predominate in green, vegetative growth). These alkaloids cause muscle paralysis by acting as a neuromuscular blocking agent, resulting in two major effects: 1) rapid, sometimes fatal effects on the nervous system and 2) they are teratogenic agents.

meaning they are known to cause birth defects when consumed during certain times of gestation. Cattle seldom choose to eat poison hemlock unless no other forage is available or it is incorporated in hay, silage, or the seeds in grain. A commonly asked question is how much plant material must be consumed by cattle to kill them. Unfortunately, the answer is not clear cut as there is considerable variation in the toxic alkaloid content of the plant depending on its stage of growth, season, moisture, temperature, time of day, and geographic region. Cattle have died by eating 0.2-0.5% of their body weight in green hemlock.

Poison hemlock is classified as a biennial that reproduces only by seed. It is capable, however, of completing its lifecycle as a winter annual in Kentucky if it germinates during the fall months. New plants emerge in the fall as a cluster of leaves that form a rosette which remains green throughout the winter in a semi-dormant state. It is most noticeable at this stage of growth in late fall through early spring with its parsley-like leaves which are highly dissected or fern-like with leaf petioles that have purple spotting and no hairs (Figure 1). The individual leaves are shiny green and triangular in appearance.



*Figure 1. Poison hemlock rosette.*

After resuming active growth in late winter, they form larger rosettes. As the plant begins to send up flower stalks, the leaves are alternately arranged on the main stem. Each individual leaf is pinnately compound with several pairs of leaflets that appear along opposite sides of the main petiole. As the plant matures, poison hemlock can grow upwards to about 6 to 8 feet tall (Figure 2). At maturity the plant is erect, often with multi-branched stems, and forms a deep taproot. The hollow stems are smooth with purple spots randomly seen along the lower stem that helps distinguish it from other plants similar in appearance. The flowers, when mature, are white and form a series of compound umbels (an umbrella-shaped cluster of small flowers) at the end of each terminal stalk. Poison hemlock foliage has an unpleasant mouse urine-like odor, detectable when near the plant or when a stem or leaf is crushed. Although this weed is often associated with areas that have moist soil conditions, it can also survive in dry sites.



*Figure 2. Mature poison hemlock plants growing in hayfield.*

Fortunately, most animals avoid grazing poison hemlock if other forage is readily available. However, animals are more likely to consume green plants during the late winter and early spring when other forage species are limited or when dry lotted or starving animals gain access to an overgrown field. All parts of the plant, including the seeds, contain the toxic alkaloids coniine and gamma-coniceine. Gamma-coniceine is more toxic than coniine and is at its highest concentration in early growth. As the plant matures, gamma-coniceine undergoes chemical reduction to the less toxic alkaloid coniine. Seeds and dried plant material contain the highest concentrations of coniine. Although toxicity is reduced

during drying due to volatility of coniine, animals will eat much more dried poison hemlock than fresh because palatability is greatly improved. Seeds are highly toxic and can be a source of poisoning when they contaminate cereal grains fed to livestock. Therefore, avoid feeding animals hay or grain known to contain poison hemlock.

Symptoms of acute poisoning can occur rapidly after ingestion of plant material anywhere within 30 minutes to 2 hours depending on the animal species, quantity consumed, and stage of plant growth. Initially the affected animal may develop nervousness, salivation, tearing, frequent urination, and signs of abdominal pain. There may be a detectable mousy odor to the breath and urine. Symptoms progress to muscle tremors, incoordination, and weakness, difficulty breathing, and death can result within hours due to respiratory failure. If acute poisoning does not progress to collapse and death, signs can begin to improve within several hours, with full recovery in as few as 6-8 hours.

Diagnosis is based on history of plant ingestion, clinical signs, and chemical analysis for presence of alkaloids in rumen contents. Activated charcoal may help bind alkaloids if administered prior to onset of signs. Avoid exciting or stressing symptomatic animals, as that may exacerbate symptoms and result in death. Poisoning is prevented by providing sufficient, good-quality forage and preventing livestock exposure. Public health is a concern when dealing with poisoned animals because of the possibility of alkaloid residues in meat. Elimination of plant toxicants through the milk is a minor route of excretion but may be important when consumed by a calf or a human. More importantly, people have been accidentally poisoned when they confused poison hemlock for plants such as parsley, wild carrot, or wild anise.

Although acute poisoning is a primary concern, an equally serious problem is subacute intoxication of pregnant livestock that results in congenital birth defects. These defects are caused by inhibition of fetal movement by the plant toxin during critical fetal development. In cattle, the susceptible period of pregnancy is 40 to 100 days while in swine, sheep, and goats the susceptible period of gestation is 30 to 60 days. Defects possible include severe limb deformities (Figure 3), joint rigidity, rib cage anomalies, vertebral curvature, and cleft palate. Diagnosis of plant-induced congenital defects is only through known exposure during gestation since the alkaloids are long gone once the calf is born.



*Figure 3: Limb deformity due to ingestion of poison hemlock during 1<sup>st</sup> trimester of pregnancy. Photo courtesy of Levi Berg, (Nov. 2018)*

The principal strategy for poison hemlock control is to prevent seed production which can be a challenge since a fully mature plant can produce 35,000 – 40,000 new seeds. It is too late to utilize herbicide control methods after plants have produced flowers. Therefore, mechanical control efforts (if feasible) such as mowing or cutting down individual plants should be initiated just before peak flower production to avoid or reduce the number of new seeds produced. **The best time for control using herbicides is generally when plants are in the younger rosette stages of growth in late October/ early November or February/ early March when daytime temperatures reach the 60°s.** Make note of areas heavily infested with poison hemlock (Figure 4) and begin to look there for emergence of new plants in the fall. Herbicide products containing 2,4-D, dicamba+2,4-D (e.g. Weedmaster, Brash, Rifle-D, etc.), and aminopyralid (e.g. DuraCor, GrazonNext) are the preferred choices for obtaining effective control. Effectiveness of chemical control can decrease as plants begin to elongate and become more mature. When using herbicidal control methods on larger plants, it is important to remove animals from treated areas since animals are more likely to graze poison hemlock plants following herbicide treatment.



*Figure 4. Poison hemlock growing along fence line in December.*

**NOTICE:** On the following page there is an application for the **Russell County Agriculture & Services Brochure**. Completing this application and returning it to the **Russell County Extension Office** will allow your farm, agricultural business, product or service to be listed in the brochure for informative and promotional purposes.

This is a free service, and free advertisement for your farm or business. We encourage all interested to complete a form and return it to the extension office no later than **TUESDAY, APRIL**

**30TH.**

RUSSELL COUNTY AGRICULTURE & SERVICES  
BROCHURE APPLICATION

**Please complete this form for your agricultural product(s) and/or services to be included in the brochure. Please return this form to the Russell County Extension Office.**

Farm/Business Name: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

Cell Number: \_\_\_\_\_

Products & Services Available

Feed/Grain: \_\_\_\_\_ Corn \_\_\_\_\_ Ear \_\_\_\_\_ Shelled \_\_\_\_\_ Other\* \_\_\_\_\_

Form - \_\_\_\_\_ Hay \_\_\_\_\_ Round \_\_\_\_\_ Square \_\_\_\_\_ Wheat

\_\_\_\_\_ Other\* \_\_\_\_\_

Livestock: \_\_\_\_\_ Cattle \_\_\_\_\_ Hogs \_\_\_\_\_ Goats \_\_\_\_\_ Sheep \_\_\_\_\_ Horses

\_\_\_\_\_ Other\* \_\_\_\_\_

Breed(s)\* - \_\_\_\_\_

Horticulture: \_\_\_\_\_ Flowers \_\_\_\_\_ Shrubs \_\_\_\_\_ Landscaping

\_\_\_\_\_ Other\* \_\_\_\_\_

Varieties - \_\_\_\_\_

Fruits & Vegetables: \_\_\_\_\_ Fruits \_\_\_\_\_ Vegetables

Varieties - \_\_\_\_\_

Type - \_\_\_\_\_ U-Pick \_\_\_\_\_ Freshly Picked \_\_\_\_\_ Other\* \_\_\_\_\_

Tobacco: \_\_\_\_\_ Plugs \_\_\_\_\_ Finished Plants \_\_\_\_\_ Other\* \_\_\_\_\_

Other: \_\_\_\_\_ Honey \_\_\_\_\_ Sorghum \_\_\_\_\_ Jam/Jellies

\_\_\_\_\_ Gourds \_\_\_\_\_ Popcorn \_\_\_\_\_ Other\* \_\_\_\_\_

Custom Work: \_\_\_\_\_

Service\* - \_\_\_\_\_

**Over →**

RUSSELL COUNTY AGRICULTURE & SERVICES  
BROCHURE APPLICATION

Other necessary information that we may choose to include. Seasons, days, or hours of availability, etc. for products or services.

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\*Specify

*The listing of commodities is subject to change based on applications received. All submissions subject to Extension Council Review and must be produced in Russell County.*





# U.S. Beef Cow Inventory Continues to Decline

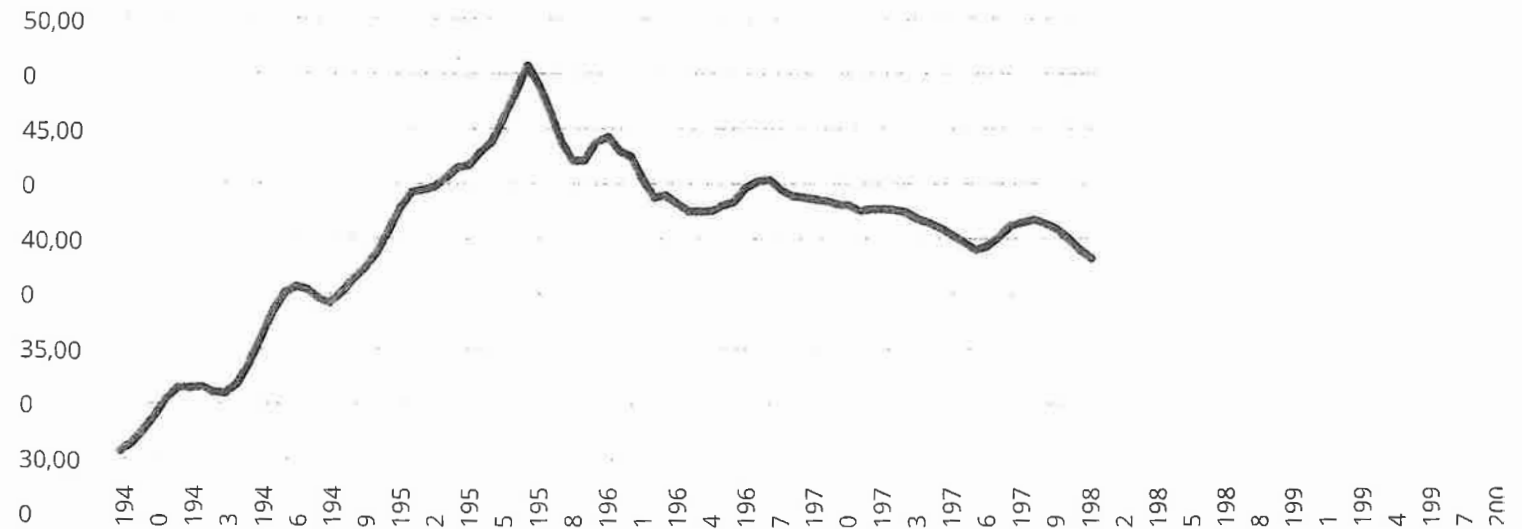
Author(s): Kenny Burdine

Published: February 2, 2024

USDA-NASS released their January 2024 cattle inventory estimates on the afternoon of January 31st. Estimates came in pretty close to expectations and confirmed that the cowherd had continued getting smaller during the course of 2023. It was really a question of how much contraction had occurred. At the national level, inventory of all cattle and calves came in little less than 2% lower than January of 2023. It is also worth mentioning that this decrease is in addition to a downward revision to the January 2023 number of about 0.5%. While this large, aggregated number likely has the highest accuracy, it includes all types and classes of beef and dairy cattle, so I tend to focus on a few of the more specific estimates from this report each year.

The first number I always look at is the number of beef cows in production, which speaks to the likely size of the calf crop in the new year. Beef cow inventory was down 2.5% from 2023, which puts the beef cow herd at the smallest level seen since 1961. This was not a surprise given cow slaughter levels and heifer retention over the course of last year. This places the US beef cowherd down 11% (3.4 million cows) from its recent high in 2019. The chart below tracks US beef cow inventory since 1940.

Figure 1: January 1 U.S. Beef Cow Inventory (1940 to 2024) (1,000 head)



Source: USDA-NASS and Livestock Marketing Information Center

USDA also estimated that the number of heifers held for beef cow replacement was down by roughly 1.5%. This was also after a significant reduction to beef heifer retention from a year ago. On a percentage basis, this is a smaller decrease than what was seen from 2022 to 2023, but still suggests that beef cow numbers are likely to decline again during 2024. Of course, things can change quickly, and beef cow slaughter will have an impact as well. Historically, calf prices at levels seen in 2023 have brought heifer retention, but higher input costs, limited hay supply in some regions, and high interest rates are limiting producer desires to expand.

The report also provided some perspective on the number of cattle on feed in the US. On a monthly basis, USDA estimates on-feed inventory for feedlots with one-time capacity exceeding 1,000 head. Despite a smaller supply of feeder cattle, on-feed inventories have been running above year-ago levels since October of last year. This was likely due to some early domestic placements, an increase in live cattle imports, more heifers on feed, and a longer number of days on feed in the latter part of 2023. Consistent with these monthly estimates, the annual cattle inventory report that came out on January 31st, placed total cattle on feed in the US 1.6% higher than January of last year. Comparing January 1 on-feed estimates in these two reports is always interesting and suggests that nearly 83% of total cattle on feed are being fed at these larger feedlots. That proportion has been increasing for some time and it is a trend that I suspect will continue.

The Kentucky inventory estimates were not what I expected. After a 7% decrease during 2022, this most recent report estimated the size of the KY beef cow herd at 907 thousand head, a slight increase from January of 2023. Given the number of cows moving through auctions last year and observations from my Extension travels, I expected beef cow numbers in the Commonwealth to be lower. Kentucky was the only top 10 beef cow inventory state that saw an increase in cow numbers. While the Kentucky beef cow herd was estimated to be slightly larger in the new year, beef heifer retention was lower.

From a longer-term perspective, this most recent USDA report paints a picture of continued tight cattle supplies. The smaller beef cow herd means the 2024 calf crop is going to be smaller. Even if we did start seeing heifer retention occurring in the new year, those heifers would not wean calves 2025. From my perspective, the only way that we could see an increase in beef cow numbers next year would be from sharp reductions in cow culling. There are macroeconomic and geopolitical uncertainties that can impact these markets, but it appears that the supply picture will remain pretty bullish.

The USDA report is summarized in the table below and the full report can be accessed

at: <https://downloads.usda.library.cornell.edu/usda-esmis/files/h/02q636h/6108x003v/kk91h696g/cat10124.pdf>

Table 1: USDA January 1, 2024 Cattle Inventory Estimates

	2023 (1,000 head)	2024 (1,000 head)	2024 as % of 2023
All Cattle and Calves	88,841.0	87,157.4	98
Cows and Heifers That Have Calved	38,336.8	37,579.8	98
Beef Cows	28,939.3	28,223.0	98
Milk Cows	9,397.5	9,356.8	100
Heifers 500 Pounds and Over	18,760.7	18,483.0	99
For Beef Cow Replacement	4,929.6	4,858.3	99
For Milk Cow Replacement	4,073.6	4,059.2	100
Other Heifers	9,757.5	9,565.5	98
Steers 500 Pounds and Over	16,056.5	15,789.2	98
Bulls 500 Pounds and Over	2,029.0	2,020.7	100
Calves Under 500 Pounds	13,658.0	13,284.7	97
Cattle on Feed	14,195.8	14,423.3	102
	2022 (1,000 head)	2023 (1,000 head)	2023 as % of 2022
Calf Crop	34,439.5	33,593.0	98

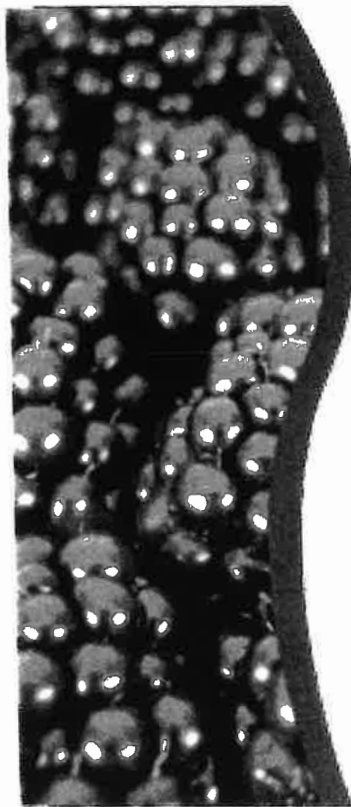
Source: NASS, USDA

Recommended Citation Format:

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## Blackberry Peach Crumble

**2 cups** fresh blackberries  
**2 cups** peeled and sliced fresh peaches  
 or 1 (16 ounce) bag frozen peach slices,  
 thawed  
**1 teaspoon** grated lemon peel  
**2 tablespoons** cornstarch  
 $\frac{1}{2}$  cup, plus  $\frac{1}{2}$  cup packed brown sugar

**$\frac{1}{2}$  cup** all-purpose flour  
 **$\frac{1}{2}$  cup** chopped blanched almonds,  
 optional  
 **$\frac{1}{4}$  teaspoon** salt  
**6 tablespoons** butter, cut into pieces

**Combine** blackberries, peaches, lemon peel, cornstarch and  $\frac{1}{2}$  cup brown sugar in a large bowl.

**Pour** ingredients into a lightly greased 8-inch baking dish.

**Mix** together flour, almonds, salt, and remaining  $\frac{1}{2}$  cup brown sugar. With pastry blender or two knives, cut in the butter until the mixture resembles coarse meal.

**Sprinkle** flour mixture over fruit.

**Bake** in a pre-heated 400° F oven for 30 minutes.

**Cool** 10 minutes prior to serving.

**Yield:** 8,  $\frac{1}{2}$  cup servings

**Nutritional Analysis:** 270 calories, 14 g fat, 25 mg cholesterol, 135 mg sodium, 35 g carbohydrate, 2 g protein, 3 g fiber.  
*Without almonds:* 220 calories, 8 g fat, 25 mg cholesterol, 135 mg sodium, 35 g carbohydrate, 2 g protein, 3 g fiber.

*Baking Kentucky Products early each year is the start of your great eating, drinking, and living in Kentucky!*



## Kentucky Blackberries

**SEASON:** June to September

**NUTRITION FACTS:** A one-half cup serving of raw berries contains 35 calories, has zero fat, and is a good source of potassium, vitamin C, and fiber.

**SELECTION:** Look for plump fruit that is uniform in color and appears fresh. Berries should be free of stems or leaves. Avoid fruit that is moldy, crushed, bruised, or contains extra moisture.

**STORAGE:** Store unwashed and covered berries in the refrigerator. Use within two days.

**PREPARATION:** Handle all berries gently. Wash berries by covering them with water and gently lifting the berries out. Remove any stems and drain on a single layer of paper

towels. Blackberries are delicious cooked, which intensifies the flavor, or eaten fresh as a snack or in a salad.

**PRESERVING:** Berries may be preserved by canning or freezing, or made into jellies or jam. For more information, contact your local County Extension Office.

### BLACKBERRIES

#### Kentucky Proud Project

County Extension Agents, Family and Consumer Sciences, University of Kentucky, Nutrition and Food Science students  
 June 2010

Go to [www.kentucky.com](http://www.kentucky.com) for more information. For more information, contact your County Extension agent, Home and Consumer Sciences office, or visit us at [www.uk.edu](http://www.uk.edu).

COOPERATIVE  
EXTENSION  
SERVICES



Source: [www.fruitandvegetables.com](http://www.fruitandvegetables.com)



## Total Solar Eclipse Will Dazzle on April 8th!

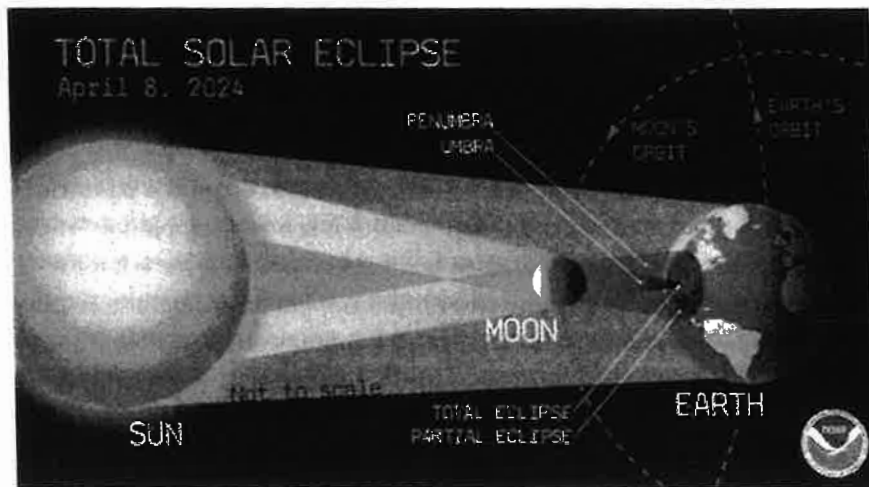
By Jane Marie Wix – National Weather Service Jackson, KY  
and Derrick Snyder - National Weather Service Paducah, KY



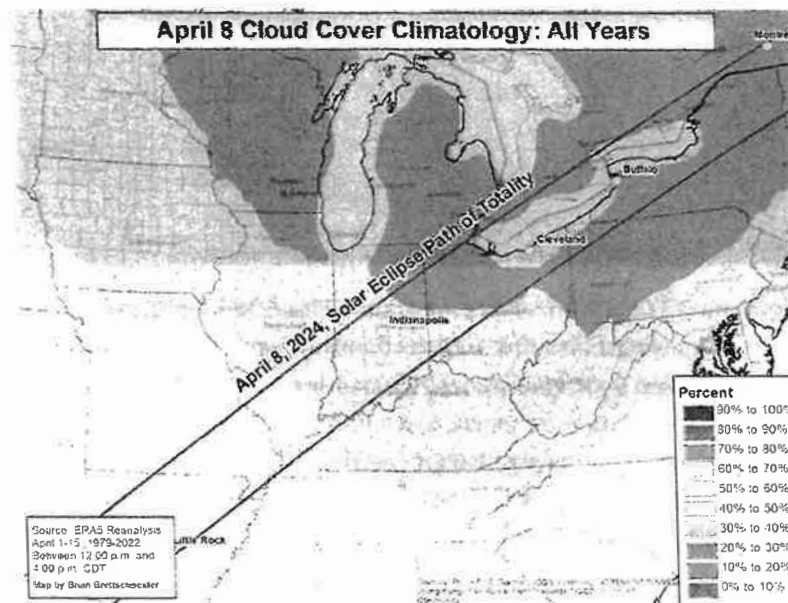
During the afternoon hours of Monday, April 8th, a spectacular celestial event will pass through the country – a total solar eclipse of the sun! The eclipse on April 8th will cross a good part of the southern, central, and northeastern portion of the country, including portions of far Western Kentucky. A large part of the Ohio River on the west half of the Commonwealth will be just outside of the totality. The map below is courtesy of the National Aeronautics and Space Administration (NASA) and shows the path of the eclipse and what time it will reach locations in its path. For places in the path of totality (where the Sun will be completely obscured by the Moon), the sun will be covered between roughly two and four minutes.



Why do eclipses occur anyway? On Earth, the Sun appears about 400 times larger in the sky than the Moon does. However, the Sun is also about 400 times further away from Earth than the Moon is. This unique planetary positioning allows for special occurrences where the Moon perfectly obscures the Sun in what we call an eclipse. Solar eclipses only occur when the positions of the Sun and Moon align just right to block the sun. This alignment happens rarely because the orbit of the Moon around Earth is not a perfect circle. In reality it is more like an oval. For this reason, the next total solar eclipse visible in the U.S. will not be until 2033 in Alaska!



Will the weather cooperate for the eclipse? The biggest obstacle to seeing a solar eclipse is cloud cover. The timing of the eclipse in early April presents a challenge, as this can be a cloudy time of year in much of the country, including across Kentucky. The map below shows the typical amount of cloud cover present on April 8th in Kentucky and surrounding states. Most areas usually have at least half of the sky covered by clouds, and locations near the Great Lakes can see much cloudier conditions, with upwards of 75% of the sky covered by clouds on an average day.



Even if the clouds do not cooperate, seeing a total solar eclipse is truly a once-in-a-lifetime experience! If you are in the path of totality, you may feel the temperature cool a few degrees as the sun becomes increasingly covered. Birds and insects will often become quiet and behave as they would at dusk. When totality arrives, the sun is completely covered! You may even be able to see the chromosphere (a layer of the sun's atmosphere) and the sun's corona (the outer layer of its atmosphere - appears as white streamers or plumes of ionized gas that flow outward into space).

## Upcoming Events

### Beef Quality & Care Assurance (BQCA) Training

Location: Russell County Extension Office  
2688 S. HWY 127, Russell Springs, KY 42642

Date and Time:

Thursday, April 4th | 5:00 PM CST

Thursday, April 18th | 5:00 PM CST

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### Russell County Sheep and Goat Association Meeting

Location: Russell County Extension Office  
2688 S. HWY 127, Russell Springs, KY 42642

Date and Time: Thursday, April 11th | 5:00 PM CST

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### Farmer's Market Meeting

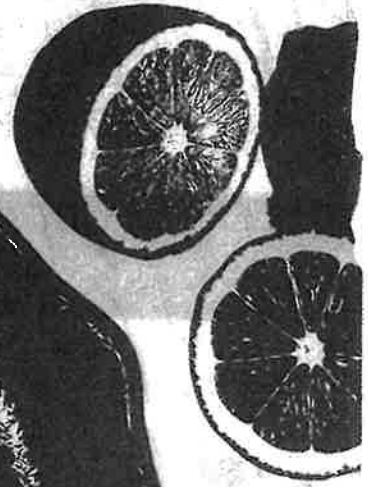
Location: Russell County Extension Office  
2688 S. HWY 127, Russell Springs, KY 42642

Date and Time: Thursday, April 25th | 5:00 PM CST



# HOOK and COOK

HARVEST YOUR OWN LOCAL MEAT



## HOOK AND COOK

Learn the basics of fishing, including rod and reel setup and fish cleaning. This class is held at the Russell County Cooperative Extension Office.

Russell Springs, KY

- May 21st
- May 23rd
- May 24th

\* participants should plan to attend at least two of the three sessions

### Event Details

Russell Co. Coop. Extension Office  
 2688 South HWY 127  
 Russell Springs, KY 42642  
 All sessions: 5:30 p.m.— 8:30 p.m.  
 (CST)

To sign up for this event scan this QR code with the camera on your smart device.



<http://app.fw.ky.gov/eventregistration/startpage.aspx?REGID=388>

More info: [Easton.Copley@ky.gov](mailto:Easton.Copley@ky.gov) or 502-330-1411







**Martin-Gatton**  
College of Agriculture,  
Food and Environment  
University of Kentucky.



# Floral Design Class



Monday, May 13th, 5:00 pm  
Russell County Extension Office  
2688 S. HWY 127  
Russell Springs, KY 42642

- Limited to 10 people
- \$10 registration fee

Learn to make a round floral  
arrangement!

Call the Russell County Extension  
Office at (270) 866-4477  
to register.

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Lexington, KY 40506



Disabilities  
accommodated  
with prior notification.

